Strand: Data Management **Grade:** 3
School: McHugh P.S.

Lesson Goal	- To create scales on graphs using many-to-one correspondence - To review the elements of a graph
Curriculum Expectations	- Collect and organize categorical or discrete primary data and display the data in charts, tables, and graphs (including vertical and horizontal bar graphs), with appropriate titles and labels and with labels ordered appropriately along horizontal axes, as needed, using many-to-one correspondence
Big Idea(s)	- Organization of data

3 Part Lesson Plan	**Materials**
Getting Started (Minds On…)	
Instructional Grouping: Whole Class - Sitting at the carpet, the teacher reviewed what students have been learning in data management so far - The teacher puts up a pre-made graph (see below) and asks students what the graph might be about, eliciting from students what is missing from the graph. The teacher records the missing details on chart paper - The class co-constructs criteria on what makes an effective graph and this criteria is posted	- Large pre-made bar graph with no information (example below) - Chart paper
Working On It (Action!)	
Instructional Grouping: Small groups - Students are given coloured tiles, 5 of one colour, 10 of a second colour, and 20 of a third. They are also given a graph template with no information and not enough room to display 10 or 20 tiles (see below) - Students are asked to come to a consensus as to what each colour might represent and to then graph their data, referring to the co-constructed criteria posted	- Graph templates (see below) - Pre-counted coloured tiles - Crayons or markers
Reflecting and Connecting (Consolidate/Debrief)	
Debrief Strategy: Math Congress - A few groups are selected to present their completed graphs to the class - The teacher poses the following questions: ▪ What process did you use to create the graph? ▪ How did you determine what scale to go by? ▪ One group went by 5s, one went by 10s, are both ok? Is one better than the other? ▪ If you were given tiles in the amounts of 4, 8, and 16, would you use a different scale? Why/why not? What scale would you use?	- Document camera to share student work
Follow-up